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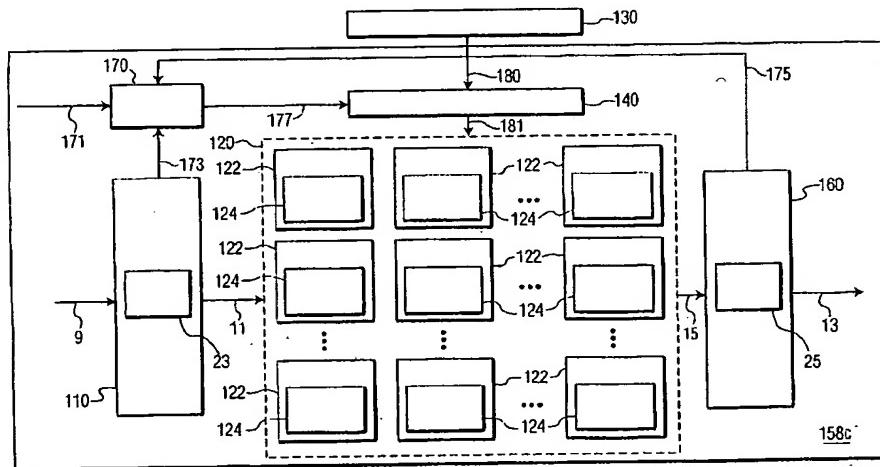
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(54) Title: A DYNAMICALLY RECONFIGURABLE SIGNAL PROCESSING APPARATUS AND METHOD FOR USE IN A HIGH SPEED DIGITAL COMMUNICATION SYSTEM



(57) Abstract: A dynamically reconfigurable signal processing apparatus (158c) is disclosed. The signal processing apparatus (158c) includes at least one system controller (170) for detecting a change of state in a high speed digital communication system (10). Responsive to the change of state, in one embodiment, signal processing function code is downloaded, in real-time or in near real-time, from an external memory (130) to be processed in an array-type processor (120). In another embodiment, signal processing function code for a plurality of signal processing functions are pre-stored in the array-type processor (120) and are switch selectable in response to a change of system state thereby obviating the need to download signal processing function code.

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